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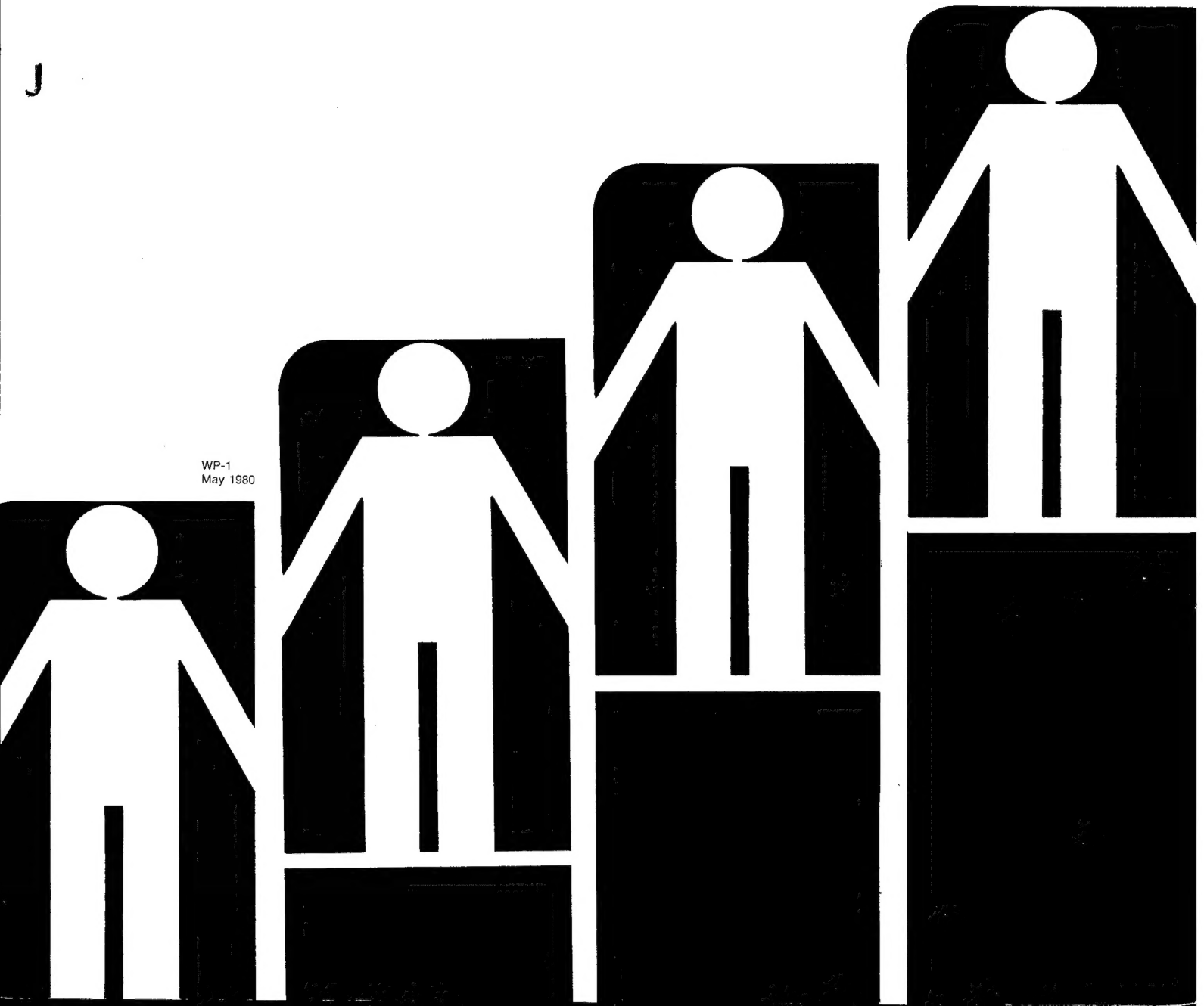
Effectiveness
and Development

Managers Guide for Improving Productivity

A
PRODUCTIVITY
IMPROVEMENT
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"There is no inherent conflict between careful planning, tight management, and constant reassessment on one hand, and compassionate concern for the plight of the deprived and afflicted on the other. Waste and inefficiency never fed a hungry child, provided a job for a willing worker, or educated a deserving student."

President Jimmy Carter

"... Effective, efficient government is a vital goal... a continuing effort. All of us who share the commitment to a generous and compassionate society must lead the effort to make it a more competent society, to match the generosity of government with efficient administration, to fulfill the trust of the taxpayers by giving them full value for the monies that pay for our programs.

To be sure, this new austerity... presents problems and difficulties.... But it also presents opportunities to combine competence with compassion. Efficient management is in itself an act of compassion—for it rechannels wasted resources into useful purpose."

Alan K. Campbell, Director
Office of Personnel Management

Five Steps to Improving Productivity

1. **Identify Your Purpose And Timetable:**
 - Clearly identify and make known your mission and goals to all those involved in carrying it out. Establish realistic timetables.
2. **Rate Yourself As A Manager:**
 - Use and sharpen your own skills; use your full authority as a manager.
3. **Involve People:**
 - Involve all employees, their union representatives, and top management. Seek their support; keep them informed; be sensitive to their needs; let them know about successes and failures; don't let their support die.
4. **Measure And Analyze:**
 - Set up a measurement system; keep it simple at first. Set up a system to analyze the information, and use your own experience and judgment to interpret the data.
5. **Choose "Ripe" Opportunities:**
 - Identify functions, units, procedures that are "ripe" for productivity improvement. Locate models in other organizations. Try them on a small scale first.

Got A Moment?

We would like to know what you think of this publication. The last page is a short evaluation form which will take a few moments to complete. The postage is pre-paid. Your answers will help us provide you with more useful information in future editions.

This is one of a series of "how-to" guides to improving productivity published by OPM's Office of Productivity Programs (OPP). Other series include analyses and reports on measuring productivity, exemplary practices studies, research findings, and employees health and incentive award publications. The purpose of these publications, and OPP programs generally, is to help agencies improve their productivity. See the back pages of this Guide for further information.

U.S. Office of Personnel Management
Workforce Effectiveness and Development
Office of Productivity Programs
Washington, D.C. 20415

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Graphic Designer, Ralph Samples

Preface

Many Federal executives tell us that significant and lasting improvements in productivity generally result from a thoughtful and deliberate process involving each employee in an organization. Although a "quick fix" may have quick payoff, its effects are generally short-lived.

As a manager, you should spend part of each day or week improving the effectiveness and efficiency of your organization. You'll need periodically to:

- Identify, refine, and redefine your mission, needs, issues, and problems,
- Collect and analyze information on how your operation is running,
- Introduce change—try new ways of doing things,
- Measure and analyze the results,
- Make systemic and/or permanent changes,
- Evaluate and continue to monitor.

Although there are some "rules of thumb" for improving productivity, it's still more an art than a science, and you'll often get faster results by

adopting/adapting someone else's ideas than by simply following theory. With that in mind, this booklet contains some theory, some practical approaches to consider, and some examples that may give you insight into your own problems.

We're not so naive as to believe that the following pages contain an instant formula to improve productivity. You'll find a general strategy, and some ideas that seem to have worked. They may also work for you, depending on your skill, your persistence, and your organization.

But you'll need to read more, to talk with managers in other agencies. On page 21 of this booklet you'll find specific information on where to get more help, and a reading list. They can lead you to new insights, new ideas, new ways to do your job better.

Much depends on your own attitude and your organization's "climate for change." In fact, a response to everything in this booklet is "It All Depends." It all depends on you and how you operate as a manager in your organization.

What Is Productivity?

Broadly defined, "productivity" is the measure of individual or organizational performance. It's not only *efficiency* (the ratio of outputs to inputs); but also *effectiveness* (to what extent the output satisfies program objectives). Put another way, productivity is concerned with both "doing things right" and "doing the right things." So it involves not just how much of a product is produced—or a service delivered—and at what cost, but also quality, timeliness, and responsiveness. For example, issuing 20 per cent more vouchers per clerk doesn't make sense if they double the number of errors, or the mail room can't keep up with the increase. You've got to find a *balance* for improving your operations.

$$\text{EFFICIENCY} = \frac{\text{OUTPUT}}{\text{INPUT}}$$

$$\text{PRODUCTIVITY} = \text{Doing things right} + \text{Doing the right things}$$

OPM's definition includes: (a) increasing efficiency, (b) increasing the usefulness and effectiveness of governmental services or products, (c) increasing the responsiveness of services to public need, (d) decreasing the cost of services, and (e) decreasing the time required to provide the services.

What's In It For You

It comes as no great revelation to hear that this is an age of fixed—and increasingly scarce—resources; most Federal managers are all too familiar with the contemporary realities of smaller budgets, cramped quarters and personnel ceilings. Similarly, most have felt—and felt with growing urgency—the public's demand for greater productivity: more services, higher quality services and more timely delivery of these services, all for the same or lower costs. This is what much of the contemporary criticism of government is all about. In short, today's manager lives in an age of declining means and rising demands. It's not a particularly easy climate—but will likely be with us for some time.

The concern for productivity is at once a response, a challenge, and an expression of faith in managers and their ability to cope with these realities. It is a *response* to public demands for more, better and faster goods and services. It is a *challenge*, since it must be accomplished under the limitations of stable or declining resources.

Finally, it is an expression of *faith* in managers and their ability to apply management practices effectively.

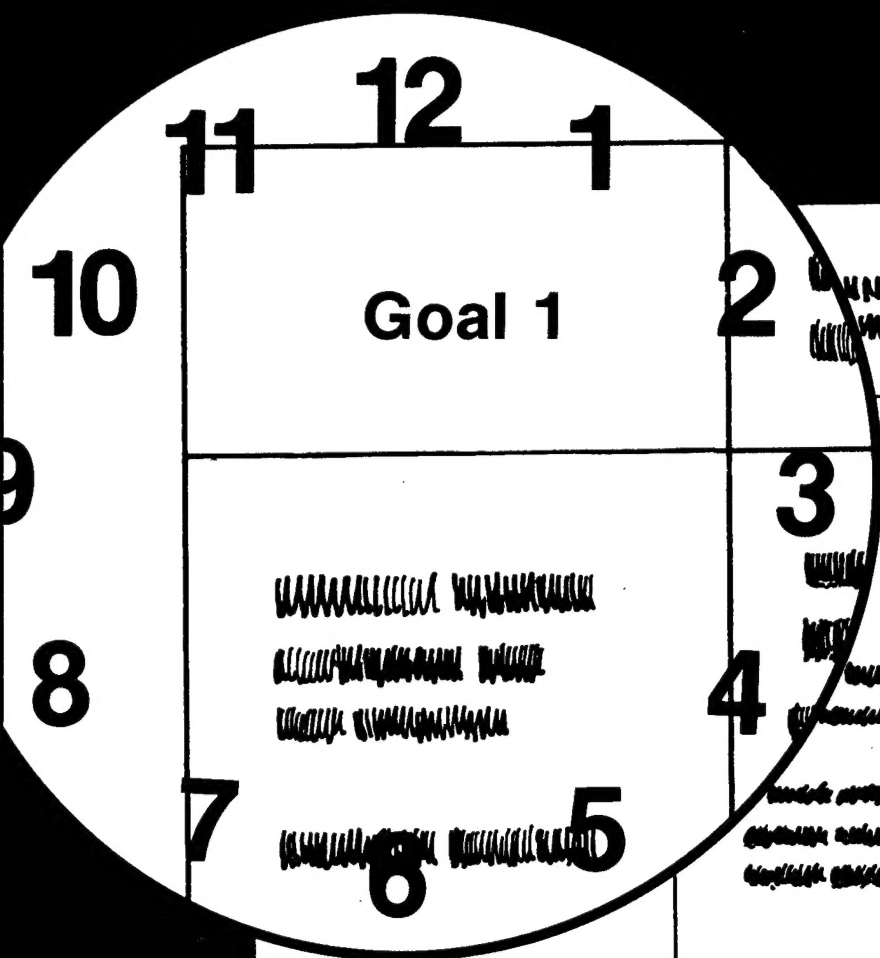
The Civil Service Reform Act of 1978 embodies this response to public demands for increased Federal productivity. Further, it recognizes the pivotal role played by managers—that they are not simply "overseers" of a process but a central factor of production. This is probably most visible in the requirements for performance appraisal. As you know, members of the Senior Executive Service (SES) will be appraised on the basis of both individual performance and organizational accomplishments. CSRA further provides that SESer's will be evaluated on "...improvements in efficiency, productivity and quality of work or service...cost savings, and timeliness of performance." The Act encourages the appraisal of merit pay managers (grade 13 through 15) on similar factors.

The message to managers is clear: if you want to succeed in government henceforth, you must review your effectiveness, identify potential areas of improvement and take steps to make these improvements. You must acquire new skills; examine alternative management practices; and test and evaluate the changes you make.

Appraisal is intended to identify those managers who have demonstrated individual effectiveness and who have met or exceeded organizational productivity goals identified in performance plans. The article of management faith is that this will spread throughout the organization to result in significant productivity gains.

That's the response, the challenge and the faith. The bottom line—or at least the most immediate bottom line for Senior Executive and merit pay managers—are the performance and merit pay awards. To be meaningful, they must fulfill two criteria. First, they must go to managers who are truly more effective in the organizational and individual sense. Second, these performance and incentive awards must motivate managers to search for improvements and undertake the individual and organizational changes which will result in productivity gains. Both the spirit and letter of CSRA, and the regulations written pursuant to it, seek to ensure that this will, in fact, be the case—that excellence will be rewarded and recognized.

That, briefly, is the top and bottom of productivity. It's not a fad; it's a response to a legitimate demand on the part of the public which we serve. It's not another word for punishment or for Draconian management styles; rather, it's a challenge to innovate in the belief that Federal managers can and will respond. Let's now examine five steps to translate these ideas into reality.



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Step 1

Make Your Goals and Purposes Clear

You'll need to make your goals and purposes clear from the start; that is, explain what you intend to do and why. At this early stage, you may not be entirely sure yourself, but at least explain your general strategy, your initial impressions, your timetable, and who you will ask for help. Make sure that all employees understand this by putting it in writing and, if possible, explaining in person.

Your goals might be to improve a process, eliminate a backlog, speed up processing of claims, reduce paper work, reduce staff by attrition or change your output or impact. Be realistic about these, and make sure that your subordinates understand that they will have an opportunity to participate in the process. Even if you are given a pre-determined mission or goal, your staff should be allowed to help plan *how* you and they will achieve it.

I need to start a productivity program because:

RATE YOUR SELF FIRST

G I V E C
LEAR DIRECTI
ONS GIVE EMPLO
YEEES WORK THAT USES
THEIR SKILLS

Step 2

Rate Yourself As A Manager

Be honest with yourself. No manager is perfect, and one place to start looking at productivity is in your own performance as a manager. You generally manage four basic resources—money, materials, space and equipment, and people. This booklet focuses on people, the most difficult yet rewarding part of management.

In managing people you have two resources.

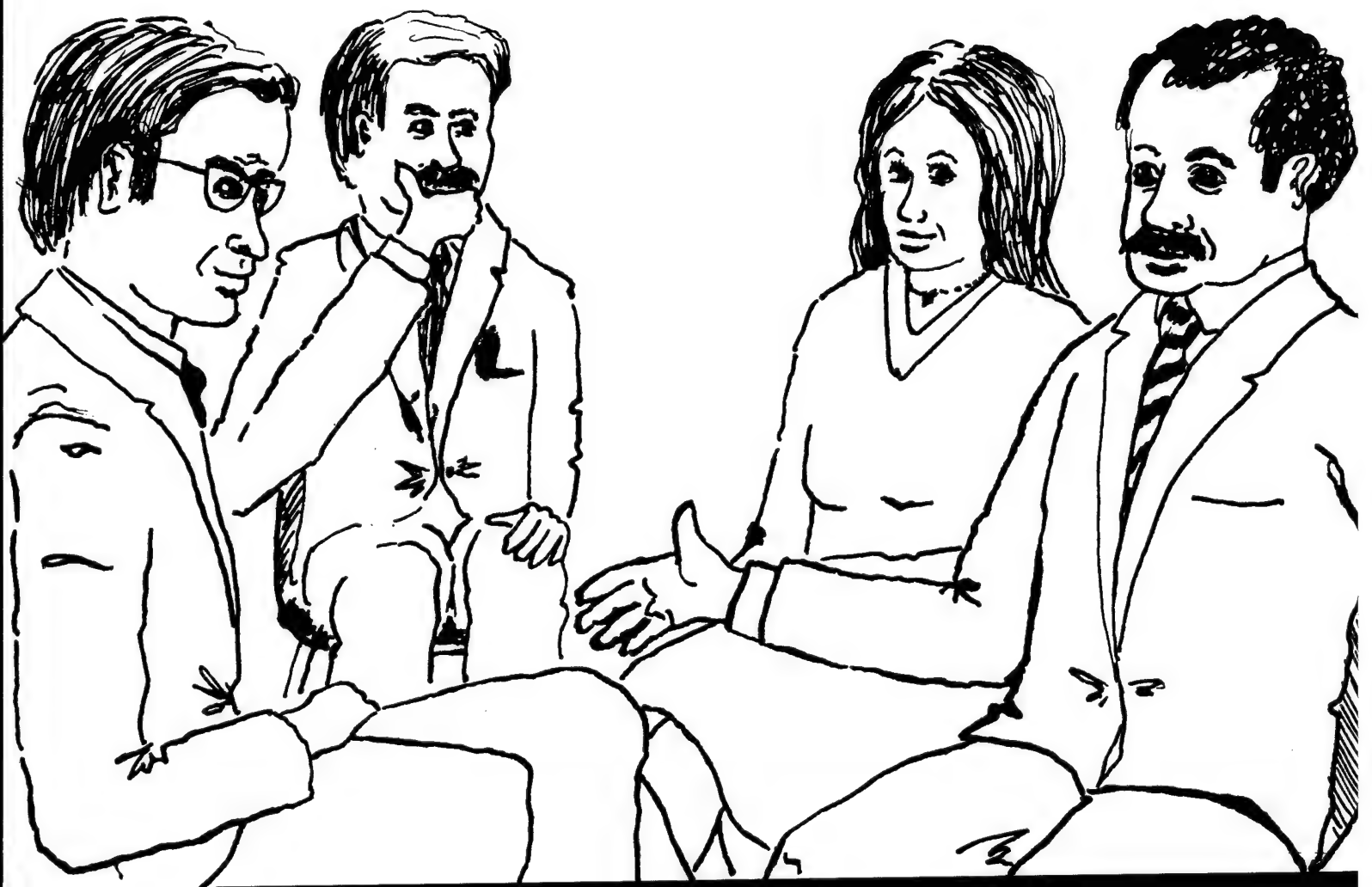
The first is your own ingenuity; that is, everything you have come to know about people, what it takes to get the job done, what works and doesn't work in dealing with them, and the appropriate and comfortable management style given your own personality. In other words the "people-related" skills and knowledge you personally bring to your job are the key to improving productivity. Many styles work, but you'll want to ensure that your style gets the results you want.

You'll want to rate yourself, for example, as to what degree you:

- 1) provide clear directions;
- 2) give employees work that uses their skills, challenges their ability and intelligence;
- 3) ensure that work groups are harmonious;
- 4) provide opportunities for promotion and interesting assignments;
- 5) give workers a voice in decisions that affect them; and
- 6) create an environment that workers feel part of.

The second resource is the Civil Service Reform Act, your Personnel Office, and the Office of Personnel Management. The law requires new performance appraisal systems, for example, and your Personnel Office and OPM can provide expertise and guidance.

*I can improve my own
management by:*



Step 3

Involve People In Looking For Opportunities

If you've been a manager, no doubt you already have some ideas about where and how your unit's operations might be improved. Perhaps it's simply training a few employees in job skills, simplifying a form, reorganizing your staff, or improving your facilities. Talk these over, informally at first, with your employees and their union representative, if there is a local union at your installation. Since sixty percent of all Federal employees are in exclusive bargaining units, it's more than likely that your employees are represented by a union. In such case, you are obligated to deal with the union on all matters related to conditions of employment. Some changes may require bargaining on impact and implementation.

Informal conversation will often give you a quick insight. If your organization is large enough, consider using a survey to elicit your employees' perceptions and ideas. Again, this is a matter where it makes good sense to deal first with the recognized union, and labor relations officer. Be open; don't merely present your views and ask for approval. Use your own ideas to prompt your employees to think about productivity. Discuss what improved productivity could mean to the organization and to them. Here are some questions you might ask:*

- Where do our opportunities lie for making improvements?
- What are the barriers and obstacles we need to overcome?
- What tasks can we do more efficiently?
- What might we stop doing?
- Which of our procedures need to be shortened? Simplified? Eliminated?
- What are employees unhappy about? Too much work? Too little work?
- How can we use the performance appraisal system to improve productivity?
- What can I do personally to improve productivity?

"Productivity" has been a negative word in the minds of many employees and union leaders, and some still suspect that it means speedup, layoffs, or management pressure. But many leaders have come to accept the idea that productivity can help

both management and labor—if the program is fair and employees jointly identify and resolve productivity problems. Continuing dialogue between managers and employees and their representatives, rather than stop-and-start consultation, encourages a positive attitude and relationship toward increasing productivity. Such dialogues are often best served by union-management committees, or productivity councils.

Forty percent of current Federal labor agreements provide for some type of labor-management committee, but very few specifically detail the formation and operation of the committee for promoting productivity and quality of work life. However, most committees have charters broad enough to encompass productivity issues, and many union leaders feel that such a non-adversary approach is more useful than formally bargaining on productivity matters. The point is that neither management nor labor can make lasting improvements alone; productivity should be the neutral ground in labor-management relations.

Collective bargaining can contribute to productivity improvement or, conversely, to impediments to efficiency and effectiveness. In fact, many of the matters presently covered by negotiated agreements directly or indirectly affect work performance. A few examples include sick and annual leave, alcohol and related counseling programs, procedures for grievances and appeals, promotions, reductions in force (RIF), adverse action and performance-based actions and, perhaps most important, procedures for developing performance appraisal systems and performance standards.

Report Your Findings To Top Management

(Even though you can do some things without approval)

After you've gotten some ideas from your staff, report your findings to your bosses; get them

*Any idea that you use, which meets certain criteria, should be submitted as an employee suggestion.

The Health Systems Approach

Each year Federal employees lose over a million days of work as a result of on-the-job accidents and illnesses and take 25 million days of sick leave; 30,000 employees retire on account of disability; and job performance often suffers as a result of alcoholism, drug abuse, or other emotional problems. To keep employees healthy and productive, agencies operate preventive health and employee counseling programs.

Preventive health programs provide such services as emergency care, disease screenings, smoking cessation clinics, health education, and physical fitness activities. If your agency doesn't have such programs, establish them--or urge your management to establish them. (See page 21 for advice). If such programs do exist, support them by publicizing them and encouraging your employees to participate, and assuring them that their medical records will be maintained in strict confidence.

NASA, for example, has operated and monitored its physical fitness program for more than ten years. Individually designed exercise programs have shown both improved employee health and increased on-the-job productivity. These have been documented by participants' self-evaluation and objective medical findings.

Counseling programs provide counseling and referral services to employees where job performance has been adversely affected by alcoholism and/or drug abuse. While the counseling is required by law, many agencies have expanded it to also deal with other types of problems, e.g., family and financial. Employee counseling programs can and do work. For example, 29,000 Federal employees were counseled and 85% were able to restore their job performance to an acceptable level in 1978.

Step 3 (cont.)

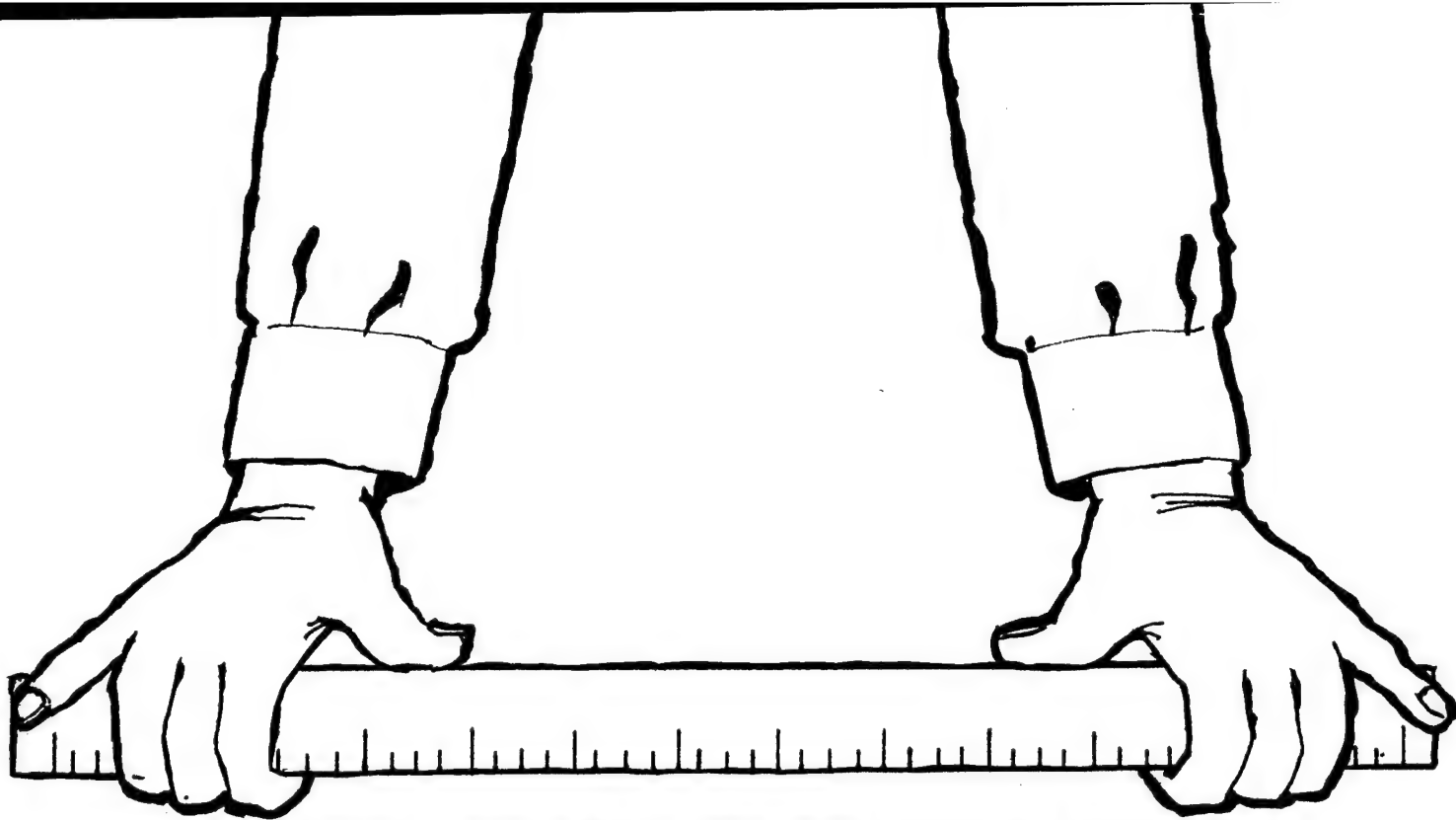
involved, get their ideas on productivity improvement, perhaps ask them to meet with your peers to identify common problems and common solutions. You'll need lots of help from top management—perhaps to redefine your objective or simply to get the support and commitment to change. You'll also need to discuss your agency's new system for evaluating your own performance and linking your pay to that performance.

One approach to dealing with top management is to identify, from your perspective, obstacles and barriers to improved productivity. Point out what seems to stand in the way of improving productivity in your shop. Identify some things that you might do on your own, and then some obstacles beyond your responsibility; for example, overly

complex regulations, too much paperwork, or systemic confusion. Then, take the opportunity to list some opportunities for improvement—for example, capital investments in equipment, better training, new attitudes on the part of middle managers. Discussing these larger problems can help you evolve your own strategy, help you integrate your own productivity improvement program into management's overall plan.

After you've talked these issues over with your employees and management, you may want to seek help from some of the resources listed at the end of this booklet. You may find that someone else has already solved a problem similar to yours.

Possible obstacles to improvement include:



SYSTEM

QUALITY

QUANTITY

Step 4

Analyze, Measure, Analyze

You'll need to analyze and measure—*before* and *after* you make changes. Many workers, especially professionals, often resent the suggestion that their output can be measured or graded. And it isn't easy to do right. Here are some steps you might consider in setting up your own measurement system:

1. Analyze your organization's objectives and problems, along with opportunities for improvements.

Even if your organization has well established functional statements and procedures, take a fresh look at its entire mission and *current* operation. Your analysis should show how things *really* work, not merely mirror your own perceptions or duplicate existing documents. Base your analysis on your discussion with employees, but be sure you have fully diagnosed and fully understood your organization's problems and its opportunities to change for the better. Changes can be made in many ways. Be sure you have thought through the major options in terms of the advantages, disadvantages and costs. Ask the advice of those who know something about the various options before you decide which one to choose.

2. Decide what ought to be measured.

Activities which at first appear too complex or nebulous for adequate measurement are more manageable when broken down into component parts. You should determine what part of the process can be controlled, and work within those boundaries. You may decide to distinguish between quantifiable and nonquantifiable products; that is, at the end of a given time, do you have a concrete product in hand or simply time spent in an activity with no tangible output to be evaluated?

3. Define the output measures.

Some of your output measures should permit you to see and reflect changes in quality as well as quantity. In a data processing unit where the measure of output is number of forms keypunched, redesigning a form to provide more information is a quality change.

Thus, if the output index is not adjusted to show the increased data, it will not reflect the change in quality.

4. Determine the input measures.

The simplest is labor; that is, staff years or hours. This measure is adequate if personnel is the major cost of doing business. But if your organization also uses large amounts of energy, material or equipment you'll need to look at historical relationships between labor and these other costs.

5. Establish the collection system.

Study existing accounting and management information to see if the data you need is already available. If not, make sure that the system you create gives you the information you need on time, accurately, and as simply as possible. Generally, you can begin with broad measures; then, after you get the "feel" of the measurement system, you'll want to refine it so you can compare your own data over time, or compare it with other units doing similar work.

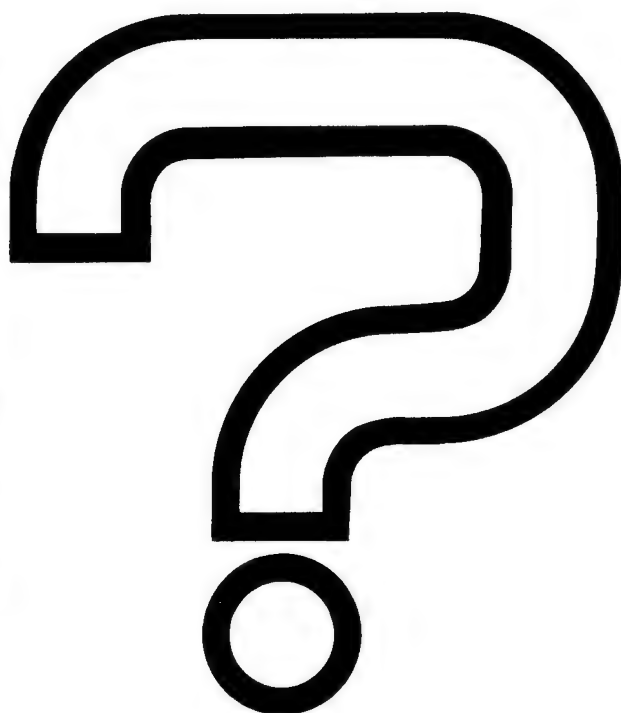
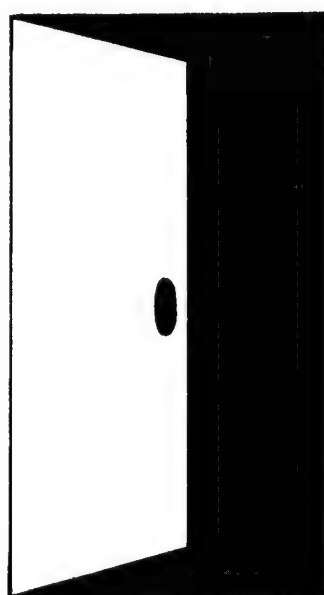
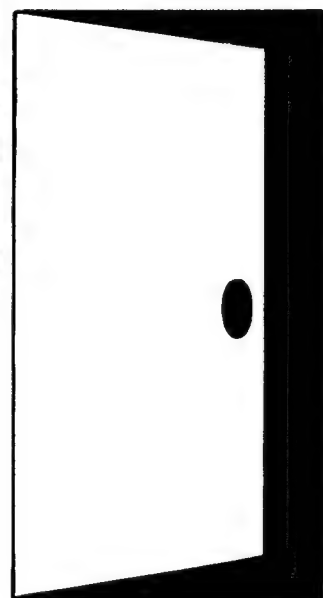
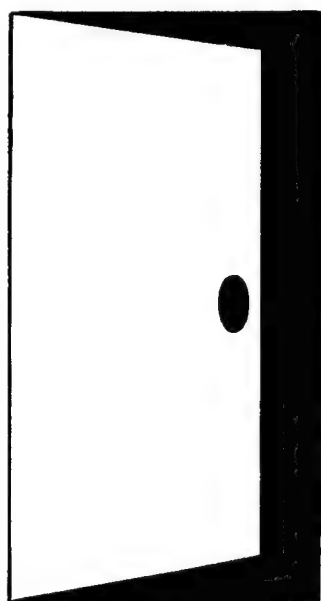
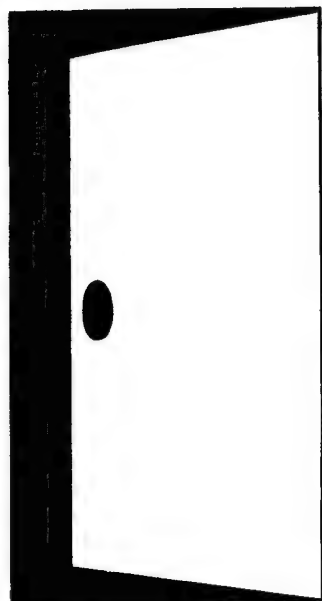
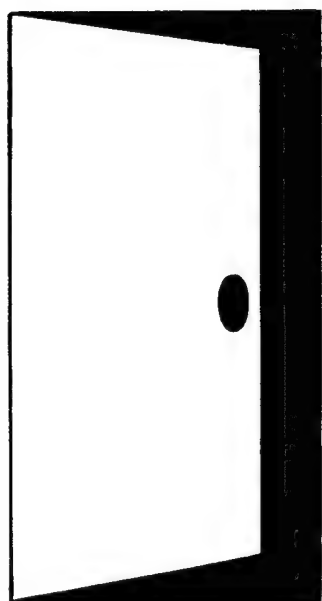
6. Analyze validity and usefulness.

Once the data collection system is in place, continue to evaluate both its validity and usefulness. Analyze the data to determine if it adequately represents the current activities of your organization and if it provides useful management information for your decision making. It is equally important that you and your staff continually review the data system, and refine it when necessary.

Managers also worry about the *results* of measuring productivity. This concern has been valid in the past for three basic reasons:

- measures have often been inadequate;
- the data is often used improperly in making decisions; and
- many managers feel that productivity increases will be used as reasons to reduce their budget, or that reduced staff will endanger their grade or salary.

To avoid poor use of measures, you'll need to approach the problem with care and discuss with management the potential effects of improving productivity.



Step 5

Choosing Ripe Opportunities

—Some approaches to consider

O.K., you've analyzed your work, have begun a measuring system, and found some problems. Now, let's look at four approaches which you might use singly or in combination.

(a) "People" Approaches

Your most important resource is your employees. The Civil Service Reform Act gives you more authority to manage your employees, and also holds you accountable for the results. *You* set the standards, provide the direction, authorize training and appraise their performance. So it's your responsibility to ensure that they are both efficient and effective. You'll need to ask some hard questions of them and yourself.

For example:

1. How much time does your staff spend on non-essential work? — writing reports of marginal usefulness, writing a letter when a telephone call will do, reviewing work that others should be held accountable for?
2. In response to demands for more service (product), do you simply recruit more employees or do you try to increase your staff's capability? The money you spend on more staff might be better spent on upgrading your people or their equipment, or redesigning their procedures or work styles.
3. When do you have the heaviest demands on staff time? Part of each day or week? Seasonally?
4. If you have a good employee in what has become a "Mickey Mouse" job, pretty soon you'll have a "Mickey Mouse" employee. Do you give your staff maximum authority, responsibility and accountability? Some managers under-use their staffs because they under-rate them. You might increase effectiveness by decentralizing authority—holding lower level employees more accountable for their performance. As a result, employees may find their jobs more challenging and rewarding.
5. Do you train people adequately for the real problems they will confront, or is training mostly a "reward"? Do you spend enough time counseling employees to identify their weaknesses and correcting those weaknesses?
6. Do you properly reward good performance and correct poor performance? Do you, for example, believe that an employee's salary is reward enough for good work, or do you try to understand what will motivate continued good work; perhaps outstanding work?

One key issue is the new performance appraisal system, which requires you to identify and explain "critical elements" of each employee's job. If you're unsure about your new role in dealing with personnel matters, seek training or explanation from Personnel, or from the resources listed on page 21.

(b) Procedural Approaches

Government, like most large organizations, is thick with procedures. Some are inherited from past generations of managers and are now obsolete—some are untested, installed by a new manager eager to make his or her mark on the organization. Briefly, procedures are what they are not only because there are jobs to be done, but also because there is a law, a regulation, or a policy to follow. But, more often, less obvious factors affect procedures, such as custom, work habits, or misunderstanding of policy (i.e., "our interpretation"). We tend to forget, for example, that we set up a complex clearance procedure several years ago to protect against a sloppy employee's mistakes, but even though the employee has left and his replacement is careful, the procedure is still there.

One way to analyze procedures is to prepare a series of flow charts for all your activities.

Your charts should show how things *really* work, not how you or your boss *believe* they work. You may find, for example, that a report or contract now requires more approvals than you need, or that employees don't understand the total process they're part of but focus only on their immediate tasks. Don't forget to involve the workers as well as the supervisors.

One agency that has used these types of charts to understand its work processes better is the Bureau of Health Planning in HEW. First, the agency diagrammed its programs. Once all parts of the program were clear, the agency established

Case Study—Effectiveness and Efficiency

You'll need to distinguish between *efficiency* and *effectiveness*. Efficiency is the measure of how much work is done per day or dollar. Effectiveness is the measure of how well you achieve your objective.

For example, let's say you have a complaints answering unit and set as your goal that all complaints should be answered within ten days. Reviewing your present practices, you find that only forty percent of complaints are answered within that time. You also find that the unit's employees can answer an average of twelve complaints a day, while a similar unit's employees answer twenty a day. One reason, you discover, is that the second unit has automatic typewriters, so you get these for the first unit, and later take another measure—employees now average twenty complaints a day, and respond to all within ten days. OK, you've improved the efficiency of one unit, but now let's look at that in the context of your total organization.

Its mission, you read from your budget package, is to "Provide loans to all eligible households." You, or someone, has determined that you don't have enough funds to achieve this overall mission. You decide not to publicize the program and to make the loans on a first-come first-served basis. By mid-year the money runs out; you are getting 200 complaints a day. Because *they* are efficient and effective, your complaints unit can respond in 10 days, but you've not achieved your overall mission to "Provide loans to all eligible households." Your *organizational effectiveness* is inadequate, or

your mission is unrealistic. You decide to redefine your mission to "Identifies the most needy households and provides loans selectively to them," with the sub goals of "grant 30,000 loans during the year," (7,500 per quarter) and "process applications within 30 days."

You analyze the loan application review units and find that employees in one unit complete eight applications a day, while those in the other unit complete twelve. You also find that the slower workers make almost no errors, while the speedier ones have a twenty percent error rate. You simplify the application form, reduce the number of reviews required, train the employees, and give incentive awards to those who produce more than the standard of twelve. Now the employees are processing fifteen applications a day, almost error-free.

You find that you have approved 6,000 loans by the end of the first quarter, and that average processing time is 40 days per loan. You are short 1,500 loans and processing time is 10 days too long.

You meet with your key staff who tell you that your goal is impossible to meet. You redefine your objective to 24,000 loans for the year, but insist that applications be processed in 30 days. You are getting only twenty complaints a week, so the complaints unit is almost idle. You decide to use the unit's staff and equipment to process loan applications, now prepared manually. This move cuts the processing time down to thirty days. You've improved efficiency and effectiveness—productivity.

Step 5 (cont.)

measures for each of the steps and then was able better to determine its progress in accomplishing its objectives. ("Evaluability Assessment" by Joe Wholey, *Evaluation: Promise and Performance*, Washington, D.C.: The Urban Institute, 1979.)

(c) Environmental Approaches

The efficiency of industrial workers has been studied for decades, and their productivity has increased much more than that of office workers. But with more than half of the work force now "white collar", we're just starting to examine productivity in the office environment.

In a typical organization, 90 percent of costs are associated with personnel (salaries, benefits, etc.), about nine percent with physical plant (building, maintenance, fuel), and about one percent with furniture and tools. Given the fact that physical environment strongly affects behavior, and that environment is such a small part of total cost, improving the work space can have a real impact on people and, through them, on productivity.

Office workers themselves believe they are not working to full capacity. A Louis Harris survey found that 74 percent believed they could produce more if the physical environment were improved. Yet, capital investment per office worker is only about \$2,500, compared with \$25,000 for industrial workers and \$35,000 per farm worker.

Mere technology, however, isn't the basic answer. Office workers believe that the environment controls them, that they don't control it. It's interesting that the computer often warrants a specially built room, including its own air conditioning, while employees work in a dehumanizing row-on-row bull pen of uniform grey-green desks and file cabinets.

A lot of work has been done in psychology, architecture, human engineering, management, organization development, communications technology, and operations research on the problem of office environment. Each has a different approach but there's been little coordination or agreement among these disciplines about the office work environment. For example, flextime has implications for office density and use of space; job redesign affects the work station and office layout; and a quality work environment can be a reward just like money. You've got to get the space planners and personnel specialists together.

Environment can and should be used as a tool that enhances work. The shape of the office, its spaces, placement of furniture and equipment, light, color, and sound can all support (or hinder) its occupants and their work. Privacy, personal space, territoriality, noise, lighting, and other factors *do* affect work and productivity.

Many private corporations have analyzed and revamped their offices, with measured results of increased productivity and job satisfaction.

- McDonald's corporate headquarters in Chicago sought to achieve a statusfree environment in 1971, with open planning and specially designed work stations. They report that "turn-over among clerical and administrative workers dropped 75 percent... and that morale and spirit increased."
- The Weyerhaeuser Corporation, after installing carefully designed furniture in an open office layout, reported that 35 percent of the workers felt they were making faster, better decisions.
- The Reader's Digest in New York City, one year after installing flexible furniture designed for particular tasks, reported an increase in work-flow and communications between project members, and a 25 percent increase in work.

One "quick-fix" for improving productivity has been the "open" or "landscape" office, which promises higher morale, better communications, and more efficiency. A strong argument for the open plan is its quality-of-life aspects. Remember, though, that workers should participate in such decisions as where they will be located and just what furniture is provided. When workers don't participate in planning a new office layout, the results can be *less* productivity rather than more.

The best payoff results from a heavy up-front investment in time, planning and purchase of the right kind (often more expensive) of equipment and furniture. GSA's new Systems Furniture Test Program is evaluating results of systems furniture in some 200 offices involving 13,000 workers. (For more information, contact GSA; page 21).

To start your thinking, here are some questions to ask yourself, your employees, and your space planner.

Individual Needs

Do the employees each have enough space and the right kind of space to do their work properly? How do they know? How do you know? Is their equipment and furniture in working order and appropriate for the job? Can the work space be adjusted to individual needs and tasks?

Group Needs

Is the space adequate for meetings, movement, good communication and interaction? Can it be adjusted to meet changes in group size?

What Some Managers Have Done

Flextime

One means of increasing time coverage for an office is flextime work scheduling. Several agencies have already used this approach to scheduling their employees' time and many others are beginning. One agency that had an early success was the Social Security Administration in Baltimore, Maryland. Applying flextime in two data processing units simultaneously increased production and reduced overtime. (Personnel Research and Development Center summary of "An Experimental Study of Job Enrichment." A final report submitted to the U.S. Civil Service Commission by Edwin A. Locke. Published in the Joint Financial Management Improvement Program's *Annual Report to the Congress: Volume Two: Case Studies*, June, 1975.)

Part-time

Another means of increasing agency capacity to meet work demands is to use part-time or intermittent employees. Since 1968 HUD has hired professional women (GS-9 and above) on a part-time basis. The P-T Program, as it is called in HUD, serves several objectives, including adding a personnel reserve from which candidates can be drawn, and allowing workers to reestablish or maintain professional status

at less than full work schedules. ("Part-Time Employment" in *Alternative in the World of Work*, National Center for Productivity and Quality of Working Life, 1976.)

Suggestions

General Services Administration renewed employee interest in its suggestion program by offering employees twice the normal cash award for significant ideas submitted during a three month period. The awards increased employee participation by twenty percent and the number of suggestions adopted by sixteen percent. You can increase interest by simply responding to suggestions promptly and seeing that they are carried out.

Rewards

The Navy Personnel Research and Development Center introduced a pay incentives program at its west coast Naval Shipyard. Using employee feedback and performance standard-setting techniques with key punch operators, the agency rewards workers who exceed "normal" expectations of performance with a monthly check, separate from their paychecks. The program has produced an eighteen percent increase in productivity and projected savings of \$920,000.

My "Ripe opportunities" include:

Step 5 (cont.)

Psychological and Social Needs

Do employees feel they have enough control of their environment, or do they feel that *it* controls *them*?

Do they feel that the space gives them enough privacy to be productive? Are they distracted or do they feel isolated? Does this tend to make them less productive?

Too often, the long range planning and justifications involved in getting proper space and equipment are discouraging, but if the environment is important, these factors are worth working on.

(d) Capital Investments: Budget Considerations

Enhancing productivity by investing in new technologies has been the major reason for fast-growing productivity in our factories and farms, but not in government, except for the computer and word processing. Two reasons for the lack of investment have been:

- major spending on equipment usually requires long lead time and detailed justification for the budget process; and
- many managers simply don't have enough information about equipment to understand its implications for reducing costs and improving operations.

In spite of these difficulties, relatively small capital investments can and do pay off. For example, the Army Ammunitions Plants invested some \$2.6 million in 91 projects during 1972-74, which resulted in savings of \$4.2 million, with an average pay-back time of 7½ months. The average cost of these projects was \$28,400.

Starting in 1977, the Department of Defense has supported a Productivity-Enhancing Capital Investment Program to improve efficiency through labor- and cost-saving equipment and facilities. The program has two facets—one to encourage long-range investment planning, and the other to provide seed money for near-term fast-payback projects. Here are some examples of benefits when investments are properly made:

- A warehouse manager bought two "stock selector" trucks for \$25,000; they saved \$16,000 a year and paid for themselves in 18 months by releasing one employee for other work.
- A machine shop manager installed a vertical band saw for \$53,000; it saved \$47,000 a year by increasing productivity and reducing over time.

- A maintenance activity acquired a chrome-plating machine for \$97,000 to refinish worn transmission parts instead of buying new parts. Savings of \$326,000 a year are expected during the ten-year life of the equipment.

But managers can err here just as easily as in managing personnel. Here are two capital investments that did *not* improve productivity or reduce operating costs.

- A justification for two power sweepers, with estimated annual savings of \$34,000 and a two-month payback, was based on a savings of about 50 staff-hours weekly. But the sweepers were used only to clean limited areas, with no savings.
- A justification for a line printer, with estimated annual savings of \$6,100, was based on releasing an employee for other work; but the employee continued to do the same work as before with no evidence of increased production.

The General Accounting Office found that DOD's "fast payback" investment program "enables Defense to finance productivity-enhancing investment opportunities that might otherwise not be funded because they were not provided for in the budget and, if not obtained quickly, could result in significant loss of savings." GAO was able to validate only nine projects, with an average cost of \$42,000 and pay-back time of three months, and felt that the program was only partially successful because:

- managers didn't pay enough attention to identifying investment opportunities or were reluctant to make the investments because they were risking their reputations if the equipment didn't pay-off;
- pre-investment analysis and justification was often wrong or incomplete; and,
- savings were inadequately monitored or inaccurately reported.

You'll need to get input from your staff, talk with your procurement and budget people about capital investment opportunities, and then manage equipment as closely as you manage people. It's a new subject for some Federal managers, but it may have more potential than you realize.

What Next?

If you've read this far, you may already have a few ideas but may be wondering what to do first. Many managers find the problem of improving productivity so big that they either make up a long range plan and then gradually forget it, or make a few changes and then slide back into the old routine. Perhaps the most important thing to keep in mind in that improving productivity is a long term process of development—of yourself, your management, your employees, your entire organization. It takes continuous evaluation and analysis, continuous probing for possible improvements, continuous reinforcing of all those involved. It's pretty much a combination of persistence and creativity, along with some luck—luck to have a supportive boss, a stable organization, and the energy to stick with it.

A 1977 survey* of 100 Federal managers' ideas on productivity revealed several practical elements of a successful productivity program. Here they are:

* *Determining a Strategy for Improving Federal Government Productivity*, National Center for Productivity and Quality of Working Life, January 1977.

1. Recognize and accept the importance of improving productivity—not much will happen unless *you* are committed. You've got to believe that something can be done; you've got to be enthusiastic about it.
2. Use your existing authority—improve the use of awards and incentives, for example, by allocating a certain percentage of your budget for rewarding good work and stimulating improved work.
3. Establish working alliances; downplay adversary relationships. Get to know managers of programs similar to yours; get acquainted with managers in budget, personnel and other staff offices.
4. Continue to clarify your priorities, goals, objectives and measurements.

As you proceed, communicate with all those involved, explaining what you are doing, why you are doing it, and their role. Continue to keep them all informed of progress, change, results, setbacks.

When you feel you've got something good, contact the Office of Productivity Programs at OPM. We'll help you validate your results, and publish them for other managers to learn from. Good luck!

My next steps are to:

Where to Get Help

Office of Personnel Management

Productivity Resource Center

Tel (202) 632-7647

Working with the OPM Library and the National Technical Information Service, helps you locate documents, reports and studies on productivity.

Consulting Services

Tel (202) 632-6811

Offers general and special consulting services, and locates appropriate consulting services from throughout the Federal government and from private organizations and universities. The Special Programs Division offers specific help on performance appraisal.

Training

Tel (202) 632-6802

Provides inter-agency training, helps evaluate training, identifies training needs, works with agency training officers. For example, three courses are devoted solely to training managers in performance appraisal techniques.

Research

Tel (202) 632-6164

Conducts specific studies for agencies, provides survey instruments and conducts surveys of employees, issues reports and reviews.

Program Development

Tel (202) 632-6151

Identifies practical approaches to productivity improvement, helps you develop and evaluate specific productivity programs, identifies successful programs and publishes the results.

Measurement and Analysis

Tel (202) 632-5563

Analyzes government-wide productivity data, works with agencies and employee organizations to develop accurate measures and measurement systems, provides information to agencies on results.

Employee Health

Tel (202) 254-6190

Promotes health services for employees, helps agencies establish specific health programs, works with agencies to improve employee counseling programs.

Incentive Awards

Tel (202) 632-4596

Helps agencies improve their awards programs by providing guidance on effective use of awards and suggestions systems and training materials for employees, first line supervisors, managers and awards program personnel.

General Services Administration

Space Planning Branch

Tel (202) 566-1874

Provides technical and procedural advice on justifying and approving space and equipment, refers agencies to manufacturers and planners, suggests options for design service and procurement, helps with employee surveys, and acts as a clearinghouse on various systems throughout government.

These publications are available from the Productivity Resource Center, (single copies free). Use order form on evaluation sheet opposite.

INCREASING FEDERAL WORK FORCE PRODUCTIVITY (WP-2-January 1980). Sixteen page description of the Workforce Effectiveness and Development Group, U.S. Office of Personnel Management. Explains what WED can do for Federal managers and executives, how to get WED help, the productivity improvement process, and detailed description of services.

Exemplary Practices

Under this program, OPM will review and document successful efforts and publicize the best ones for use by managers throughout government. The following are the first four case studies being considered. Agency managers are encouraged to nominate projects, programs or other examples of improved productivity. For further details contact Steve Bryant, Office of Productivity Programs, OPM, Box 14080, Washington, D.C. 20044 (Tel. 202-632-7647).

CAPITAL INVESTMENT: THE DEPARTMENT OF DEFENSE PROGRAM (WPR-7-March 1980). An innovative method of improving productivity is DOD's productivity-enhancing capital investment program. Established as a supplement to the traditional DOD budget and procurement process, it makes available special grant funds for low cost, quick return investments. By making available a source of funds free from the long lead times usually required for budget requests, managers can quickly take advantage of opportunities for savings.

LARGE SCALE EQUIPMENT MAINTENANCE: THE SAN ANTONIO AIR LOGISTICS CENTER'S PROGRAM (KELLY AIR FORCE BASE, TEXAS) (WPR-8-March 1980). A 24-page description of a program which improved productivity in equipment maintenance in a large-scale industrial operation. Elements included projects to develop more accurate labor standards, improve the work environment, instill competition and recognition at the lowest organizational level, increase individual responsibility, and increase participation in the employee suggestion program. Improvements in efficiency, product quality, and responsiveness to customer demand made Kelly the most productive Center in the Air Logistics Command for FY 78.

FINANCE AND ACCOUNTING: THE DEPARTMENT OF HOUSING AND URBAN DEVELOP-

MENT'S PERFORMANCE IMPROVEMENT PROJECT (WPR-9-March 1980) After problems with backlogs and clerical errors in the Office of Finance and Accounting, HUD implemented a performance improvement project. Its basic principle is that workers respond to feedback and positive reinforcement for correct performance. HUD's approach produced marked improvement in the performance of several work units in the Office of Finance and Accounting.

CASE MANAGEMENT: OFFICE OF THE GENERAL COUNSEL, NATIONAL LABOR RELATIONS BOARD (NLRB). (WPR-10-March, 1980) A 14-page description of a program to reduce processing time of unfair labor practice cases. Rather than setting an overall goal for processing a case from beginning to end, NLRB established interim goals for each stage of case handling. At the same time, they devised an information system to give managers monthly data to evaluate performance and identify problems. The program has virtually eliminated backlogs and substantially reduced processing time.

Measurement

MEASURING FEDERAL PRODUCTIVITY: A SUMMARY REPORT AND ANALYSIS OF 1978 DATA (WPA-2-February 1980) This summary annual report on productivity in 50 Federal government agencies covers 65 percent of Federal civilian employees, and presents FY 78 productivity data on these agencies. It shows productivity trends for the years 1967 through 1978. Information from each of the reporting agencies is aggregated into 28 functional areas such as audit, maintenance, financial management, library services and general support services. 2,660 output indicators have been developed, such as number of claims adjusted, books bound, employee actions completed, and consumer complaints processed.

AN APPROACH TO MEASURING COMMON ADMINISTRATIVE SERVICES: PERSONNEL OFFICE PRODUCTIVITY (WPA-3-February 1980) Describing a system for measuring productivity in personnel offices designed, tested and installed in 31 Federal units, this report presents the preliminary results. Major findings show that this measurement system will provide information on the time employees spend on various personnel functions and relative costs for various personnel actions. The report also develops and presents a methodology that can be applied to other common administrative services.

Evaluation Form

Five Steps to Improving Productivity

To help OPM better evaluate the usefulness of this publication, please complete and return this form. Thanks.

1. What is your general reaction to this booklet?

___ Excellent ___ Above average ___ Average ___ Poor ___ Useless

2. To what extent do you think this booklet is useful in terms of:
(check one box on each line)

	<u>Very Useful</u>	<u>Fairly Useful</u>	<u>Not Useful</u>
Motivating me to start a productivity program	_____	_____	_____
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Providing an outline for my own productivity program	_____	_____	_____
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3. Do you feel that further information, training or technical assistance on productivity is needed and desired? If so, please specify your needs.

4. How do you rate the following publication elements?

	<u>excellent</u>	<u>above average</u>	<u>average</u>	<u>poor</u>
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More Publications/Periodicals (available as indicated)

DIRECTORY OF PRODUCTIVITY AND QUALITY OF WORKING LIFE CENTERS—Lists 28 national, regional and state productivity centers, explains what they do, how to contact them, and lists publications and other educational materials. Published in 1978 by the National Center for Productivity and Quality of Working Life. Available from National Technical Information Service (NTIS). (Note: the NCP-QWL was abolished in 1978 and most of its publications have been transferred to the Productivity Information Center, National Technical Information Service, 425 13th St., N.W., Washington, D.C. 20004. Tel. (202) 724-3369.

IMPLEMENTING A PRODUCTIVITY PROGRAM: POINTS TO CONSIDER—A detailed 68-page explanation of productivity programs, with emphasis on measurement and analysis. Includes four corporate examples of productivity improvement. Published by Joint Financial Management Improvement Program, Suite 705, 666 Eleventh St., N.W. Washington, D.C. 20001. (202) 376-5415.

IMPROVING PRODUCTIVITY—A SELF AUDIT AND GUIDE FOR FEDERAL EXECUTIVES—A "how to" guide covering how to stimulate interest and support for productivity improvement, 67 pages. Published in 1978 by the National Center for Productivity and Quality of Working Life. Available from GPO, Stock No. 052-003-00592-1.

SPACE MANAGEMENT IN THE FEDERAL COMMUNITY—a broad perspective of the changes in practices and challenges in space management facing senior Federal managers today. Available from General Services Administration, Space Planning Branch, Public Buildings Service, Washington, D.C. 20405.

MEASUREMENT AND INTERPRETATION OF PRODUCTIVITY—A comprehensive analysis of productivity statistics, covering their uses and misuses, government and corporate productivity measures and concepts, measurement of inputs and outputs, and international comparisons. Discusses recommendations for improving the Bureau of Labor Statistics' (BLS) measurement system for public and private sector productivity. 422 pages, 1980, available from Office of Publications, National Academy of Science, 2101 Constitution Avenue, N.W. Washington, D.C. 20418.

PLAIN TALK ABOUT EMPLOYEE INCENTIVES—A clearly-written 18-page training guide and desk reference providing mid- and senior-level Federal managers information on: (1) effective use of recognition and suggestion programs to increase productivity; (2) the manager's role in the incentive awards program; and (3) the flexibility agencies have under revised regulations to design individual awards programs. Single copies free

from Incentive Awards Branch, WED, OPM. Tel. (202) 632-4596.

PROBLEMS ON THE JOB: A SUPERVISOR'S GUIDE TO COPING—Alcohol, drug or personal problems can impair an employee's productivity. This 12-page guide is a practical discussion of the approach supervisors should follow in dealing with these kinds of problems. Published by Civil Service Commission in 1978. Available from GPO, Stock No. 006-000-01067-9.

PUBLIC PRODUCTIVITY REVIEW—Quarterly journal focusing largely on state and local productivity issues, but relevant to Federal managers as well. Its objectives are to encourage wider use of proven techniques, cite current literature on productivity, present integrated analyses of productivity theories and concepts, and provide a medium for practitioner-academician exchange. \$10 a year, from Center for Productive Public Management, John Jay College of Criminal Justice, 445 West 59th St., New York, New York 10019.

R AND D PRODUCTIVITY— This 184-page "how to" guide admits that specific productivity improvement approaches are unique to each manager and each organization, but identifies some basic approaches. The five sections cover improving productivity of systems, operations, managers and rank-and-file employees, and profiles productive individuals and organizations. Includes an excellent 68-page bibliography ranging from planning and evaluating to effective writing, decision-making and performance appraisals. Hughes Aircraft Co., Culver City, California 90230.

STUDIES IN PRODUCTIVITY: HIGHLIGHTS OF THE LITERATURE—A series of eleven reviews of the literature and abstracts of pertinent articles and other documents. Work in America Institute, 700 White Plains Road, Scarsdale, New York 10583.

SUPERVISORY MANAGEMENT—Published by American Management Association, Saranac Lake, N.Y. 12983. Subscription \$16 a year for non-members.

WORKFORCE EFFECTIVENESS, PERSONNEL BIBLIOGRAPHY SERIES—Number 118, 1980. Published by the OPM Library as part of its bibliographic series, this 114-page pamphlet contains some 40 citations specifically on productivity, and hundreds of others on organization development, motivation, job satisfaction and attitudes, hours of work, skills inventory, and training. More recent references are contained in the Library's monthly publication, **PERSONNEL LITERATURE**. Available from your library or from GPO.